

# **ELECTRONIC STORAGE MEDIUM AND PURCHASING SYSTEM AND METHOD**

## **BACKGROUND OF THE INVENTION**

### **Field of the Invention**

The present invention relates to systems and methods for viewing and selecting images from a storage medium, and, more particularly, to such systems and methods for purchasing products depicted on a storage medium.

### **Description of Related Art**

Electronic shopping has become an increasingly important segment of the marketplace. However, consumers often become discouraged by the speed of downloading and viewing images from the internet. Further, the safety of transmitting credit card information over the internet is also questionable in the minds of many consumers.

Another area of commerce that is increasing in importance is in electronic storage media, such as compact disk-read-only memory (CD-ROM) units, which can hold files of multimedia presentations. Electronic "trading cards," for example, are known in the art, which have pictures and/or moving images based on such people as sports figures.

## **SUMMARY OF THE INVENTION**

It is therefore an object of the present invention to provide a system and method for viewing an image stored on an electronic medium and for initiating a purchase based upon the viewed image.

It is a further object to provide such a system and method for storing data on the purchase in electronic form prior to completing a purchase.

It is another object to provide such a system and method that permits a completing of the purchase.

5 It is an additional object to provide such a system and method that permits the viewing of images related to subject of the electronic medium.

These and other objects are achieved by the present invention, one aspect of which comprises a method for electronically initiating a purchase of an item using a computer. The method comprises the steps of establishing a communication between a processor and a removable electronic storage medium. The storage medium has at least one image of at least one item stored thereon.

10 The next steps comprise accessing an image of an item from the storage medium and viewing the accessed item image on a display in communication with the processor. If desired, the user electronically selects the item for purchase. An item selection automatically causes purchase data on the item to be stored on a writable memory device in communication with the processor.

15 The software application of the present invention in a preferred embodiment is resident on a storage medium that also contains digital representations of a plurality of visual images. The software application comprises means for running on a processor and means for displaying a menu on a display device in communication with the processor. The menu comprises identifiers of at least some of the images on the storage medium.

The software application also comprises means for receiving a selection of an identifier by a user through an input device in electronic communication with the processor and means for writing a file on a storage device that is in electronic communication with the processor. The written file comprises the selected identifier.

5           The storage medium of the present invention comprises a plurality of visual images stored in digital form thereon and the software application as described above.

10           The system of the present invention is for use by a consumer for electronically initiating a purchase of an item using a computer. The system comprises a removable electronic storage medium as described above, a processor and a storage device, means for reading data from the storage medium, an input device, and a display device, all in electronic communication with the processor.

15           The features that characterize the invention, both as to organization and method of operation, together with further objects and advantages thereof, will be better understood from the following description used in conjunction with the accompanying drawing. It is to be expressly understood that the drawing is for the purpose of illustration and description and is not intended as a definition of the limits of the invention. These and other objects attained, and advantages offered, by the present invention will become more fully apparent as the description that now follows is read in conjunction with the accompanying drawing.

#### **BRIEF DESCRIPTION OF THE DRAWINGS**

20           **FIG. 1A** is a flow chart of a method of use of the system.

**FIG. 1B** is a schematic diagram of the system of the invention.

**FIGS. 2A,2B** is a flow chart of the software of the invention.

**FIG. 3** is an illustration of an exemplary menu screen.

**FIG. 4** is an illustration of an exemplary tour screen.

**FIG. 5** is an illustration of another exemplary tour screen.

**FIG. 6** is an illustration of an exemplary image selection screen.

**FIG. 7** is an illustration of another exemplary image selection screen.

**FIG. 8** is an illustration of an exemplary gift selection screen.

**FIG. 9** is an illustration of an exemplary checkout screen.

#### **DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS**

A description of the preferred embodiments of the present invention will now be presented with reference to FIGS. 1A-9.

The method of using the present invention is illustrated in FIG. 1A, and the system in FIG. 1B. The system **10** (FIG. 1B) comprises a storage medium, such as, but not intended to be limited to, a CD-ROM **12**, which has stored thereon a plurality of digital representations of images and a software application. The images may comprise, but are not intended to be limited to, a two-dimensional picture, a three-dimensional image of an object, a virtual-reality walkthrough of a site, a promotion, and an item for sale, preferably related to the subject of at least one of the picture, image, or walkthrough. The software application, which will be discussed further in the following, enables the method of electronically initiating a purchase of an item from among the stored images.

The system **10** in a preferred embodiment further comprises a computer **14**, which in turn comprises a processor **16** and a storage device, such as a hard drive **18**, a storage medium drive, such as a CD-ROM drive **20**, and a modem **22**, all in electronic communication with the processor **16**. The system **10** has means through the modem **22** of connecting to a network, such as the Internet **24**. Peripherals in communication with the processor **16** comprise a display device such as a screen **26**, a keyboard **28**, a pointing device such as a mouse **30**, and a printer **32**. It is to be understood that this configuration is not intended to be limiting, and the alternate forms may be contemplated by one of skill in the art.

The method (FIG. 1A) of electronically initiating a purchase of an item **92** using a computer comprises the steps of the user's **94** inserting the storage medium, a CD-ROM **12** in an exemplary embodiment, into a disk drive **20** in electronic communication with a processor **12** (step **101**). The processor **16** accesses the CD-ROM **12**, which starts an initialization sequence carried out by the processor **12** under direction of the software on the CD-ROM **12** (step **102**). A menu screen (FIG. 3) **40** appears, having a plurality of selections **41-46** from which to choose (step **103**). Any number of selections may be offered, with three (steps **104-106**) shown in FIG. 1A, and those illustrated on FIG. 3 are not intended to be limiting. These include virtual-reality (VR) tours of New York **41** and Las Vegas **42**, which would bring up, respectively, screens **47,48** (FIGS. 4,5). These screens **47,48** illustrate two possible "tours" available to the user **94**: a simulated walking tour

through an area as laid out in a map **49**, showing where the user is in the scene **50**; and a first image **51** with a list **52** of other images available for viewing.

If the "promotions" item **45** is selected, a commercial or other promotion is presented (step **109**). This screen may comprise information, for example, related to the subject of the CD-ROM **12**, such as addresses of chambers of commerce, dates of events such as concerts or release dates of a movie or music CD, addresses of shops, or electronic links to related internet sites.

Selecting the "image gallery" choice **43** from the menu screen **40** (step **107**) brings up a screen **53** (FIG. 6; step **110**) with a plurality of two-dimensional images **54-57** thereon from which may be chosen one or more for purchase by selecting them on the screen with the pointing device **30**. Each image has associated therewith electronic identifier data. Alternatively, a second image screen **59** (FIG. 7) is available by selecting button **58** to view a larger version **60** of an image, or the set may be scrolled through **61**. The "shopping" process will be discussed further in the following.

If the "gift shop" option **44** is selected from the menu screen **40** (step **108**), screen **61** appears (FIG. 8; step **110**) with a plurality of items **62-67** shown for sale, each having electronic identifier data associated therewith. Some or all of the items **62-67** may be stored in three-dimensional format for viewing at different angles, facilitating the selection of, for example, a statue or clothing that is better viewed in different aspects.

The "shopping" steps are substantially the same for purchasing items from any of the image gallery **52,59** or gift shop **61** screens. If the user **94** wishes to purchase an item (step **111**), he/she selects one of the items from the screen with the pointing device **30**,

and a "shopping cart" area **68** is updated by the software (step **112**). When the shopping is complete (step **113**), the order form **69** (FIG. 9) is brought up, which the user **94** completes (step **114**) with the customary ordering information such as name **70**, address **71**, contact data **72**, payment information **73**, and shipping address **74**. The form also lists the selected items **75** and a total cost **76** and updates quantities if desired.

At this point, if the user does not wish to place an order immediately, the system **10** stores the order form **69** data on the user's computer **14** (step **115**), where it may reside until the user **94** calls it up (step **116**) for processing by outputting the order form **69** data to the vendor **90**, who will then ship the selected item(s) **92** to the user **94**. The order form may be output in any of a number of media; for example, the screen **69** itself may be used by the user **94** to place a telephone call to the vendor **90** and place an order; the screen **69** may be printed on the printer **32** and mailed or faxed to the vendor **90**; or the order data may be transmitted over the Internet **24** to the vendor **90**.

It can be seen that the viewing, selecting, and purchasing steps are much faster than previously known methods, and that no simultaneous connection to the Internet is required while shopping. Further, a reminder function can be provided to prompt the user **94** that a pending order remains in the computer **14** that has not been sent upon startup if desired.

Other than tours of places and associated images and items for sale, one of skill in the art will recognize that any merchandising may be accomplished with the present invention. For example, a "trading card" in the form of a CD-ROM could be offered having images, video clips, and merchandise related to a public personality such as a sports

figure, an actor or performer, or an event such as a movie, television show, or concert. Alternatively, a merchandise catalog could be offered in this form, having search capabilities and much faster viewing of images than currently available online. Therefore, it is not intended that the present invention be limited to the types of visual renderings shown herein.

The operation of the software that drives the above-described method of the present invention is illustrated in FIGS. 2A,2B. Once the CD-ROM is accessed, a setup file is written to the processor **16** for storage (step **201**), and a communication protocol is established between the processor **16** and the I/O devices **22,24,26,28,30,32** (step **202**). The opening menu **40** is presented for viewing on the display **26** (step **203**), and a selection from the user **94** is received (step **204**). The screen related to the menu **40** selection is presented on the display **26** (step **205**). If a purchase option is selected from the screen by, for example, clicking on an item with the mouse **30** (step **206**), the selection is received (step **207**), and the appropriate data are added to the shopping cart **68** on the current screen (step **208**). The data may be edited as needed on screen, such as clearing the shopping cart or changing quantities, which is received and updated by the software.

Once the user **94** is done (step **209**), the order form screen **69** is presented (step **210**). If immediate ordering is not desired (step **212**), the order data are stored on the computer **14** (step **213**) for subsequent retrieval (step **214**) by the user **94**. As mentioned above, when ordering is desired, the form may be output in a desired form (step **215**).



In the foregoing description, certain terms have been used for brevity, clarity, and understanding, but no unnecessary limitations are to be implied therefrom beyond the requirements of the prior art, because such words are used for description purposes herein and are intended to be broadly construed. Moreover, the embodiments of the system illustrated and described herein are by way of example, and the scope of the invention is not limited to the exact details of construction.

Having now described the invention, the construction, the operation and use of preferred embodiments thereof, and the advantageous new and useful results obtained thereby, the new and useful constructions, and reasonable equivalents thereof obvious to those skilled in the art, are set forth in the appended claims.